WHAT IS CLAIMED IS:

1. A method of forming a platinum conductive layer on a semiconductor device, the method comprising;

(i) positioning the semiconductor device within a chemical vapor deposition chamber;

(ii) introducing a platinum precursor gas into the chemical vapor deposition chamber for a first period of time so as to deposit a platinum conductive layer on the device;

(iii) introducing a reactant into the chemical vapor deposition chamber for a second period of time, so that organic waste compounds contacting the platinum conductive layer are removed to thereby facilitate subsequent deposition of the platinum conductive layer; and

(iv) continuing acts (ii) and (iii) until the conductive layer of a desired thickness is achieved.

2. The method of Claim 1, wherein introducing the platinum precursor gas into the chemical vapor deposition chamber comprises introducing a platinum precursor gas into the chemical vapor deposition chamber wherein the platinum is bonded to a methyl compound so as to improve the step coverage of the platinum precursor gas when forming the conductive layer.

3. The method of Claim 2, wherein introducing the platinum precursor gas comprises introducing a (methylcyclopentadienyl)(trimethyl) platinum gas into the chemical vapor deposition chamber.

4. The method of Claim 1, wherein introducing the reactant into the chemical vapor deposition chamber comprises introducing the reactant both simultaneously with the platinum precursor gas and sequentially to the platinum precursor gas.

5. The method of Claim 4, wherein the reactant is a reducing agent.

6. The method of Claim 4, wherein the reactant is an oxidizing agent.

7. The method of Claim 4, wherein introducing the reactant comprises introducing a reactant selected from the group comprising N_2O , O_2, NH_3, NO, H_2O and ozone.

8. The method of Claim 1, further comprising:

monitoring the rate of deposition of the platinum layer;

determining when the rate of deposition has decreased below a desired threshold;

halting the supply of the platinum precursor gas upon determining that the rate of deposition is less than the desired threshold; and

providing the reactant after halting the supply of the conductive precursor gas.

9. The method of Claim 8, wherein monitoring the rate of deposition of the platinum precursor gas comprises monitoring the amount of platinum components in the platinum precursor gas that arrives at a waste receptacle following introduction of the platinum precursor gas into the chemical vapor deposition chamber.

10. The method of Claim 9, wherein monitoring the amount of platinum components in the platinum precursor gas that arrives at a waste receptacle comprises using a mass spectrometer to obtain a measurement indicative of the amount of platinum components of the platinum precursor gas that arrives at the waste receptacle.

11. A system for forming a conductive element on a semiconductor device, the system comprising:

a chamber that receives the semiconductor device;

a conductive precursor gas supply system that provides a conductive precursor gas to the chamber wherein the conductive precursor gas has both conductive components that when deposited on the semiconductor device form the conductive element and organic components that facilitate step coverage of the conductive element over the semiconductor device;

a reactant supply system that introduces a reactant into the chamber that is selected to enable deposition of the conductive components of the conductive precursor gas on the semiconductor device and to remove organic components off of the conductive element to facilitate further deposition of the conductive components of the conductive precursor gas on the conductive element; and

a controller that monitors the rate of deposition of the conductive components and controls the delivery of the conductive precursor gas and the reactant into the chamber, wherein the controller introduces the reactant into the chamber when the rate of deposition of the conductive components onto the semiconductor device falls below a pre-selected threshold.

12. The system of Claim 11, wherein the conductive precursor gas supply system includes a carrier gas supply device that supplies the conductive element in a gas form and a liquid precursor system that receives the carrier gas and produces the conductive precursor gas for delivery into the chamber.

13. The system of Claim 12, wherein the conductive precursor gas supply system provides a platinum precursor gas into the chamber.

14. The system of Claim 13, wherein the conductive precursor gas supply system provides a platinum precursor gas into the chamber wherein the platinum is bonded to a methyl compound so as to improve step coverage of the platinum when forming the conductive element.

15. The system of Claim 14, wherein the conductive precursor gas supply system introduces a (methylcyclopentadienyl)(trimethyl) platinum gas into the chemical vapor deposition chamber.

16. The system of Claim 11, wherein the reactant supply system introduces a reactant selected from the group comprising N_2O , O_2, NH_3, NO, H_2O, ozone, plasma, vacuum, inert gas, and UV light.

17. The system of Claim 11, further comprising a waste receptacle that receives waste conductive precursor gas following introduction of the waste

conductive precursor gas into the chamber and wherein the controller determines whether to introduce the reactant gas based upon the constituent components of the gas receives in the waste receptacle.

18. The system of Claim 17, further comprising a sensor positioned within the waste receptacle that provides a signal indicative of the rate of deposition of the conductive element of the conductive precursor gas on the semiconductor device during formation of the conductive element.

19. The system of Claim 18, wherein the sensor provides the controller with a signal indicative of the amount of conductive element being transmitted to the waste receptacle following introduction into the chamber such that when the amount of conductive element in the waste receptacle exceeds a pre-selected threshold, the controller can introduce the reactant into the chamber to reduce the build up of non-conductive components on the conductive element.

20. The system of Claim 19, wherein the sensor comprises a mass spectrometer.